**544E LL LOG LOADER**

*Model shown may include options*

### ENGINE PERFORMANCE

<table>
<thead>
<tr>
<th>Nm</th>
<th>lb-ft</th>
<th>hp</th>
<th>kW</th>
</tr>
</thead>
<tbody>
<tr>
<td>542</td>
<td>400</td>
<td>120</td>
<td>86</td>
</tr>
<tr>
<td>522</td>
<td>400</td>
<td>100</td>
<td>74</td>
</tr>
<tr>
<td>502</td>
<td>400</td>
<td>80</td>
<td>59</td>
</tr>
<tr>
<td>482</td>
<td>400</td>
<td>60</td>
<td>44</td>
</tr>
<tr>
<td>462</td>
<td>400</td>
<td>45</td>
<td>33</td>
</tr>
</tbody>
</table>

**FEATURES**

- 115 SAE net hp (86 kW) John Deere turbocharged diesel engine
- Four-wheel drive
- Operating weights to 30,821 lb. (13 980 kg)
- Single phase, single stage torque converter with countershaft power shift transmission, 4 speeds forward, 3 reverse
- Power steering, Articulated frame
- Four-wheel wet-disk power brakes and parking brake
- Inboard planetary final drives
- Optional front-axle hydraulic differential lock or NoSPIN front differential
- Optional vandal protection
- Rollover protective structure (ROPS) with canopy. Meets criteria of SAE J394a, SAE J1040 APR88, OSHA 1926.1001 and ISO 3471. Also meets FOPS (falling object protective structure) criteria SAE J231 JAN81 and ISO 3449.

### ADD VERSATILITY WITH:

- Lumber forks
- Log forks
- Grapples
- Hydraulic log and lumber tines
- Clearing rakes
- Wood chip containers
Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with SAE Standards. Except where otherwise noted, specifications are based on a machine with all standard equipment, 17.5-25, 12 PR, L3 tires, two rear counterweights, ROPS cab, full fuel tank, and 175-lb. (80 kg) operator. Gross power is without cooling fan.

Gross 120hp (90kW)

Net 115hp (86kW)

Engine: John Deere 6-359T

Type: 4-stroke cycle, turbocharged diesel

Bore and stroke: 4.19 x 4.33 in. (106.5 x 110 mm)

No. of cylinders: 6

Displacement: 359 cu. in. (5.884 L)

Maximum net torque @ 1500 rpm: 343 lb-ft (465 Nm) (47.4 kg-m)

Cooling fan: Blower

Air cleaner w/ restriction indicator: Dry type

Electrical system: 12 volt w/65 amp alternator

Batteries (one 12 volt): Engine-driven, axial piston pump delivers 46.3 gpm (175 LI/min) at 600 psi (4137 kPa)

No. 2-D fuel @ 35 API gravity: No derating is required up to 10,000 feet (3050 m) altitude.

Air cleaner w/restriction indicator: Precleaner and dry type

Transmission: Countershaft, Power Shift

Forward Speeds: mph (max.) km/h (max.)

1 4.5 7.3
2 7.6 12.2
3 17.2 27.7
4 24.6 39.5

Reverse Speeds:

1 4.5 7.3
2 7.6 12.2
3 17.2 27.7

Differentials — choice of:

Front and rear conventional
Front hydraulic differential lock and rear conventional
Front NoSPIN and rear conventional

Drive Axes: Inboard-mounted planetary gears to each wheel. Front axle fixed. Rear axle oscillates 22 degrees total (28.6 in. [727 mm] vertical travel at center of tire).

Steering: Full power steering. Frame articulated 80 degrees by two hydraulic cylinders. Turning radius (measured to centerline of outside tire): 16 ft. 3 in. (4.95 m)

Cylinder size: Stroke: 19.29 in. (490 mm)

Bore: 2.76 in. (70 mm)

Rod diameter: 1.57 in. (40 mm)

Brakes: Service: Power-actuated, 4-wheel inboard-mounted, wet disk. Foot-operated by either pedal
Parking: 9.84 x 2.36 in. (250 x 60 mm) expanding shoe on transmission output shaft, foot-operated. Includes transmission disconnect with two-level monitor warning.

Hydraulic Systems: Steering and loader functions: An engine-driven gear-type pump delivers 46.3 gpm (175 L/min) at 600 psi (4137 kPa) (42.2 kg/cm²) and 2400 engine rpm. Loader function relief valve pressure setting is 2750 psi (18 961 kPa) (193.4 kg/cm²). Maximum steering pressure is 2300 psi (15 859 kPa) (161.7 kg/cm²).

Control: Single-lever or optional two-lever for basic fork. Additional lever for fork with clamp.

Loader hydraulic operating cycle times at full throttle:

Raise: 5.8 sec.
Dump: 1.9 sec.
Lowering: float 3.2 sec. power 3.9 sec.

Brakes: Engine-driven, axial piston pump delivers 8.1 gpm (31 L/min) at 2400 engine rpm and 600 psi (4137 kPa) (42.2 kg/cm²). Maximum system pressure is 2300 psi (15 859 kPa) (161.7 kg/cm²).

Hydraulic Cylinders:

Bore Stroke
Boom, two 4.92 in. (125 mm) 30.71 in. (780 mm)
Rollback, one 5.51 in. (140 mm) 21.57 in. (548 mm)

Cylinder rods: Ground, heat-treated, chrome-nickel-plated, polished.

Boom cylinder rods 2.48 in. (63 mm) dia.
Rollback cylinder rods 2.48 in. (63 mm) dia.

Tires — choice of:

17.5-25, 12 PR, loader tread, L2
17.5-25, 12 PR, rock tread, L3
17.5 R25, One Star, L2 equivalent
20.5-25, 12 PR, loader tread, L2
20.5-25, 12 PR, rock tread, L3
23.1-26, 10 PR, LS2
28L-24, 14 PR, LS2

Capacities:

Fuel tank: 55 gal. (208)
Cooling system: 25 qt. (24)
Crankcase: 18 qt. (17)
Crankcase, including filter: 20 qt. (19)
Transmission case and filters: 10 qt. (9.5)
Front and rear differential: 17 qt. (16)
Loader hydraulic sump: 80 qt. (76)

Operating Information:

Operating weight: 26,497 Ib. (12 019 kg)

Lift capacity maximum height:
Fork level: 10,827 lb. (4911 kg)
Fork rolled back: 9789 lb. (4440 kg)

Lift capacity ground level:
Fork level: 19,215 lb. (8716 kg)
Fork rolled back: 25,900 lb. (11 748 kg)

SAE tipping (40 deg. full turn) maximum reach:
Fork level: 9,919 lb. (4499 kg)
Fork rolled back: 13,470 lb. (6110 kg)

Straight tipping — maximum reach, fork rolled back: 16,065 lb. (7287 kg)

Maximum rollback @ ground level: 45°

Minimum diameter clamp closing: 8 in. (203 mm)

* Allied equipment log fork ordered through John Deere dealer.

Additional Standard Equipment:

Differential, conventional, front and rear
Engine: 17.5 R25, One Star, L2 equivalent
Antifreeze:
Fan guard
Fuel filter
Muffler
Pre cleaner and dry type air cleaner

Frames:
Articulation transport lock
Drawbar
Lockable engine side shields and rear grille

Operator's station:
Adjustable, deluxe vinyl seat
Dual inside rearview mirrors

Lights:
Driving w/guard
Flashing and turn signal
Stop and tail

Two level warnings: Parking brake on

Additional level monitor system:

Indications:
Reverse warning alarm
Transmission clutch disconnect
Transmission oil cooler
Optional or Special Equipment:

Buckets:
- Bolt-on cutting edges
- Bucket teeth

Differentials:
- Front axle disconnect
- Front hydraulic differential
- Front NoSPIN differential

Engine:
- Additional battery
- Alternator - 130 amp
- Cold weather (ether) starting aid
- Engine coolant heater
- Radiator sand shield
- Water separator, fuel

Frames:
- Auxiliary bottom guards, transmission and front frame
- Fenders, front or rear
- Lift hooks
- License plate bracket
- Rear counterweights
- Steps, frame mounted
- SMV emblem
- Transmission side frame guards

Hydraulics:
- Two spool valve w/single-lever control
- Two spool valve w/two-lever control
- Three spool valve, single-lever control w/auxiliary control lever for third function
- Three spool valve, two-lever control w/auxiliary control lever for third function

Lights:
- Front and rear work

Loader:
- Automatic boom height control
- Automatic return-to-dig

Operator's station:
- Mirrors, outside
- Radio - AM/FM for cab
- ROPS cab w/heater-defroster/pressurizer, dome light, front and rear windshield wiper and washer, 90-amp alternator

Seats:
- Adjustable deluxe suspension vinyl seat w/armrests
- Adjustable deluxe suspension cloth seat w/armrests for cab

Secondary steering
- Three-inch (76 mm) seat belt w/o retractor

544E LL LOG LOADER DIMENSIONS

<table>
<thead>
<tr>
<th>TIRES</th>
<th>17.5-25</th>
<th>20.5-25</th>
<th>23.1-26</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tread width</td>
<td>78.38 in. (1940 mm)</td>
<td>74.80 in. (1900 mm)</td>
<td>84.13 in. (2137 mm)</td>
</tr>
<tr>
<td>Overall width</td>
<td>95.28 in. (2420 mm)</td>
<td>96.93 in. (2462 mm)</td>
<td>109.09 in. (2771 mm)</td>
</tr>
<tr>
<td>Change in height</td>
<td>0</td>
<td>+2.40 in. (61 mm)</td>
<td>+4.09 in. (104 mm)</td>
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